UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

22852

7590

02/23/2010

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413

EXAMINER				
BROWN, VERNAL U				
ART UNIT	PAPER NUMBER			

2612

DATE MAILED: 02/23/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,042	05/19/2006	Giorgio Grego	09952.0037	7560

TITLE OF INVENTION: METHOD OF AND APPARATUS FOR LONG DISTANCE READING OF PASSIVE TAGS IN RADIO FREQUENCY IDENTIFICATION SYSTEMS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/24/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

maintenance fee notifications.  CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Fee(	(s) Transmittal, This	certif	icate cannot be used for	domestic mailings of the or any other accompanying
			pape have	ers. Each additional e its own certificate	paper of mai	such as an assignmer ling or transmission.	nt or formal drawing, must
22852 FINNEGAN, E LLP 901 NEW YORE	7590 02/23 IENDERSON, FA X AVENUE, NW		ETT & DUNNERher State addr trans	Cert reby certify that this es Postal Service w ressed to the Mail smitted to the USPT	ificate s Fee(s ith suf Stop O (57	of Mailing or Transt Transmittal is being ficient postage for first ISSUE FEE address 1) 273-2885, on the da	nission deposited with the United t class mail in an envelope above, or being facsimile tte indicated below.
WASHINGTON	I, DC 20001-4413						(Depositor's name)
			_				(Signature)
	_						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO:	RNEY DOCKET NO.	CONFIRMATION NO.
10/580,042 TITLE OF INVENTION IDENTIFICATION SYS		APPARATUS FOR L	Giorgio Grego ONG DISTANCE READ	DING OF PASSIVI	E TAC	09952.0037 3S IN RADIO FREQ	7560 QUENCY
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	05/24/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS	]			
BROWN, V	ERNAL U	2612	340-010200	•			
CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  The Address indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.  Change of correspondence address (or Change of Correspondence Address of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.							
recordation as set forth (A) NAME OF ASSIC	h in 37 CFR 3.11. Comp GNEE	oletion of this form is NO	data will appear on the part a substitute for filing and (B) RESIDENCE: (CITY strings)	assignment.	OUNT	RY)	cument has been filed for
4a. The following fee(s) are submitted:  Issue Fee  Publication Fee (No small entity discount permitted)  Advance Order - # of Copies  The Director is hereby authorized to charge the required fee(s), any definition overpayment, to Deposit Account Number (enclose and overpayment).							
••	s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no long	0			
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than the Office.	he applicant; a regis	tered a	ttorney or agent; or the	e assignee or other party in
Authorized Signature				Date			
Typed or printed name	e			Registration No			
an application. Confident submitting the completed this form and/or suggesti	tiality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th	on is required to obtain or r 1.14. This collection is est depending upon the indiv the Chief Information Office COMPLETED FORMS TO	timated to take 12 m ridual case. Any cor er. U.S. Patent and 1	ninutes nment Fraden	to complete, including s on the amount of tin park Office, U.S. Depa	g gathering, preparing, and ne you require to complete rtment of Commerce, P.O.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/580,042	05/19/2006	Giorgio Grego	09952.0037	7560	
22852 7590 02/23/2010		EXAMINER			
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER			BROWN, VERNAL U		
FINNEGAN, HE	NDEKSON, FAKAI	DOW, GARRETT & DUNNER			
LLP 901 NEW YORK	,	ow, GARRETT & DUNNER	ART UNIT	PAPER NUMBER	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 949 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 949 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)		
Notice of Allowability	10/580,042 <b>Examiner</b>	GREGO, GIORGIO Art Unit		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Lxammer	Artonic		
	VERNAL U. BROWN	2612		
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu <b>IGHTS</b> . This application is so	this application. If not included nication will be mailed in due course. <b>THIS</b>		
1. This communication is responsive to <u>5/19/06</u> .				
2. The allowed claim(s) is/are 22-42.				
<ul> <li>3. Acknowledgment is made of a claim for foreign priority unally all blooms. Copies of the priority documents have a copies of the priority documents have a copies of the priority documents have a copies of the certified copies of the priority documents have a copies of the certified copies of the priority documents have a copies of the certified copies of the priority documents have a copies of the certified copies of the priority documents have a copies of the certified copies of the priority documents.</li> </ul>	e been received. e been received in Application	n No		
International Bureau (PCT Rule 17.2(a)).				
* Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements		
4. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which give				
5. CORRECTED DRAWINGS ( as "replacement sheets") must	st be submitted.			
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review	( PTO-948) attached		
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	,			
<ul><li>(b) ☐ including changes required by the attached Examiner'</li><li>Paper No./Mail Date</li></ul>	s Amendment / Comment or	in the Office action of		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t				
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT				
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Inf	ormal Patent Application		
2.   Notice of Draftperson's Patent Drawing Review (PTO-948)		ımmary (PTO-413),		
3.  Information Disclosure Statements (PTO/SB/08),	Paper No./ľ 7.	Mail Date Amendment/Comment		
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's	Statement of Reasons for Allowance		
of Biological Material 9.				
/Vernal U Brown/				
Primary Examiner, Art Unit 2612				

#### DETAILED ACTION

The application of Giorgio Gregg field 5/19/2006 for Method and Apparatus for Long Distance Reading of Passive Tags in Radio Frequency Identification System filed has been examined. Claims 22-42 are pending.

## Allowable Subject Matter

Claims 22-42 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art of record fail to teach or suggests an interrogating station comprising an antenna array detecting at the interrogating station an absolute value and a phase of each response signal received at each antenna in the array; submitting each received response signal to phase conjugation, thereby generating a respective phase-conjugated signal; and transmitting the phase conjugated signals back to the passive tags.

The closest prior art of record US Patent 6185440 teaches a communication station using an antenna array to transmit signals to the remote units (abstract) and US Patent 4370653 teaches adjusting the phase of the interrogation signal based on the phase of the response signal received from the RF tag but is silent on teaching the limitations as claimed.

.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2612

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERNAL U. BROWN whose telephone number is (571)272-3060. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vernal U Brown/ Primary Examiner, Art Unit 2612